Krishaan Bhagat

krishaanb@gmail.com | (630) 965-1031 | LinkedIn | GitHub | Digital Portfolio

EDUCATION

University of Wisconsin-Madison **May 2025**
Bachelor of Science in Computer Science | GPA: 3.99/4.0
Relevant Courses: Machine Learning, Machine Organization, Algorithms, Object-Oriented Programming, Software Engineering

TECHNICAL SKILLS

Languages: Python, Java, JavaScript, TypeScript, C++, C#, C, SQL, HTML, CSS
Technologies: React, Node.js, Flask, Next.js, PyTorch, LangChain, Angular, Vue.js, Vitest, Jest, Tailwind, Bootstrap, Stencil, Ember
Tools: Git, Docker, CI/CD Pipelines, MySQL, MongoDB, Firebase, SQLAlchemy

EXPERIENCE

Esri **May 2024 - August 2024**
Software Engineer Internship

- Directed the migration of header links from Ember to Stencil components on a platform serving **1 million+** users, orchestrating epic solutioning with a cross-functional team to design and implement section links as an enhancement post-migration
- Expanded the stat card Schema and uiSchema by introducing new layouts and card views, and integrated TSX components to support these customization capabilities, impacting **350,000+** organizations worldwide
- Constructed comprehensive test suites leveraging Jest, Karma, and Jasmine, achieving **80%** overall testing coverage and fortifying codebase integrity through the architecture of unit, integration, and E2E testing

Anuvu **June 2022 - September 2022**
Software Engineer Internship - Aviation Network

- Contributed to the real-time monitoring system in Python that reduced network downtime by **15%** and improved reliability
- Utilized the Linux operating system's command line interface to diagnose modem-related issues on **105+** in-flight aircraft, ensuring consistent connectivity and maintained network functionality
- Commissioned **135+** modems proficiently by testing satellite network configurations and managed data within a SQL database

PROJECTS

Bracket Brain **March 2025**
To make bracket-building more meaningful and engaging for NCAA Tournament fans, fostering community through predictions
https://frontend-e4ce.onrender.com

- Engaged **500+** student users, generating **1,200+** bracket submissions and **1000+** chatbot queries, demonstrating user interest
- Designed an AI-driven prediction system using a Random Forest Classifier trained on historical NCAA tournament data (2008-2024), achieving a cross-validation accuracy of **98.2%** on test data
- Architected a secure backend using Python, Flask, and RESTful APIs, SQL database integration, containerized deployment with Docker, and CI/CD pipelines that facilitated **50+** automated deployments, enabling efficient workflow

Commute Compass | Esri Hackathon Finalist | Lead Full-Stack Developer **July 2024**
To simplify the complex decision of where to live and work by combining real-time commute analysis with geospatial data
Note: Project is inactive due to expired hackathon API key | Live Demo

- Embedded Indeed and Rent.com listings to provide real-time job and housing options, driving **320+** daily searches
- Integrated ArcGIS Maps SDK for JavaScript with Service Areas and Geometry Engine APIs to calculate and visualize overlapping commute zones, reducing commute time overlap by **37%** compared to single search
- Leveraged ArcGIS Business Analyst and Geoenrichment Service APIs to generate dynamic regional infographics with insights of **125+** economic variables per demographic, enabling users to explore key amenities

Referee Ready **June 2023**
To empower aspiring referees with the knowledge and resources they need to officiate games confidently, through interactive guidance
https://soccer-referee-app.vercel.app

- Delivered training resources to **126,000+** soccer referees, boosting accessibility and engagement among youth officials nationwide
- Developed an AI-powered chatbot featuring a RAG system using Langchain, Chroma vector base, OpenAI embeddings, enabling semantic rulebook search with an GPT fallback for broader soccer knowledge
- Migrated web app from HTML, Vanilla JavaScript, and CSS to React, enhancing scalability, maintainability, and user experience